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APPLICATION NO. .	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RADA, ALEX P

ART UNIT	PAPER NUMBER
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3714

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/668,919	Applicant(s) MEADOWS ET AL.	
	Examiner Alex P. Rada	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 87-151 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 87-151 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/882652.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter of claims 117-135, 137, 143-148, and 150-151 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150

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words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 112-113 are objected to because of the following informalities: Claims 112 and 113 depend from claim 147. It would appear that the subject matter of claims 112 and 113 should depend from claim 111 and the rejection set forth below will be treated accordingly. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 117-135, 137, and 143-144 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification and/or enabled in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not disclose the apparatus and the method of automatically identifying a handheld device using a unique identification number as recited in claims 117-135 and 143-144. The examiner requests that applicant point out in the original disclosure the claimed limitations.

The specification does not disclose displaying the pace of play of a golfer relative to a predetermined normal pace of play as recited in claim 137. The examiner requests that applicant point out in the original disclosure the claimed limitation.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 87-98, 103-106, 136-138, and 145-148 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard '938 in view of Fisher '485.

8. Barnard disclose an integrated hand held golfing device having the following:

An integrated device having a computing device (figure 1), a GPS device (20), a display, the GPS adapted to produce measured location information corresponding to a location of the GPS device independent of golf course infrastructure (column 13, lines 1-41), a means for modifying the measured location information to account for changes in environmental conditions to obtain corrected location information (column 2, lines 36-61), in which the

examiner interprets the means for modifying the latitude, longitude, and altitude to be the automatic corrections executed by the GPS device (background), a means for determining the distance between the GPS device and the object by using corrected location information, and the device is adapted to display the distance on the display (figure 17) as recited in claims 87 and 94.

The measured location information includes latitude and longitude values corresponding to the GPS device (column 13, lines 1-16 as recited in claim 88.

The measured location information includes altitude values corresponding to the GPS device (column 4, lines 62-64) as recited in claim 89.

The computing, GPS, and display are in a single handheld housing (figure 1) as recited in claims 90 and 95.

The object being a green, sandtrap, and water hazard (column 31, lines 4-16) as recited in claims 91-93, 96-98, and 104-106.

Storing location values for multiple golf course targets on the device based on GPS measurement taken on a first date using the GPS device (column 13, line 1-48), generating corrected location values on the first date and a second date, in which the examiner interprets the stored map data to be equivalent the first and a second, and computing, independent of the golf course infrastructure, the distance between the desired point and one of the multiple target using the corrected location values and the location information concerning the desire point, in which the examiner interprets the mapping of the course to be an equivalent to the desired point and one of the multiple targets (column 13, line 1-48) as recited in claim 103

A means for displaying the pace of play of a golfer relative to a predetermined normal pace of play (column 13, lines 1-16) as recited in claim 137.

The GPS device uses at least one tunable GPS parameter to produce the measured location, in which the examiner interprets the mapping of the course creation to be equivalent to the tunable GPS parameters (column 13, line 1 – column 14, line 46) as recited in claim 138.

A representation of the object is displayed on the apparatus display (28) and the representation varies to approximate the view of the object as seen from the golfer's line of sight (figures 5 and 17) as recited in claim 145.

The object is a green and a moveable cross hair (cursor) is displayed on the display and the distance between the apparatus and the position of the cross hair (cursor) is computed and displayed (figures 5 and 17) as recited in claim 146.

The cross hair is displayed so that a portion thereof intersects the boundary of the displayed green at an intersection point and the distance between the apparatus and the position of the intersection point to the green is computed and displayed (figures 5 and 17) as recited in claim 147.

The cross hair is displayed so that one or more portions thereof intersect the boundary of the displayed green at two intersection points and the distance between the apparatus and the portions of each of the two intersection points relative to the green are computed and displayed (figures 5 and 17) as recited in claim 148.

Barnard does not expressly disclose the following:

Determining the distance by using previously stored information concerning the location of the object as recited in claim 87.

Generating corrected location values using the device based on different in environment condition and obtain location information concerning a desired point using the GPS device as recited in claim 103.

A means for displaying wind direction to indicate relative direction of wind as viewed from a golfer's approach to a green as recited in claim 136.

A means for displaying pre-recorded distances between two targets without the use of any data from the GPS device as recited in claim 150.

The means for modifying the measured location information modifies the measured location information to account for changes in environment condition with use of externally generated real time correction data to account for changes environmental conditions as recited in claim 151.

Fisher teaches the following:

Determining the distance by using previously stored information concerning the location of the object (column 9, lines 36-67) as recited in claim 87.

Generating corrected location values using the device based on different in environment condition and obtain location information concerning a desired point using the GPS device (summary) as recited in claim 103.

A means for displaying wind direction to indicate relative direction of wind as viewed from a golfer's approach to a green (summary) as recited in claim 136.

A means for displaying pre-recorded distances between two targets without the use of any data from the GPS device (summary) as recited in claim 150.

The means for modifying the measured location information modifies the measured location information to account for changes in environment condition with use of externally generated real time correction data to account for changes environmental conditions (summary) as recited in claim 151.

By using previously stored information concerning the location of an object and the changes of environmental conditions, one of ordinary skill would provide a golfer with precise information on a golf shot.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Barnard to include determining the distance by using previously stored information concerning the location of the object and the direction of wind as taught by Fisher to provide an avid golfer with a precise distance between a golfer's ball to the hole.

9. Claim 139 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard '938 in view of Fisher '485 as applied to claim 94 above, and further in view of Atkinson '938.

10. Barnard in view of Fisher disclose the claimed invention as discussed above except for the following:

An integrated device having a GPS device uses at least one tunable GPS parameter to produce the latitude, longitude, and altitude values as recited in claim 139.

Atkinson teaches the following:

The GPS device uses at least one tunable GPS parameter to produce the latitude, longitude, and altitude values (figures 4a-4e and summary) as recited in claim 139. By having tunable parameters, one of ordinary skill in the art would provide a precise distance between different objects.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Barnard to further include at least one tunable GPS parameter as taught by Atkinson to provide a precise distance between two or more objects.

11. Claims 99-100 and 140 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard '938 in view of Dudley '786.

12. Barnard discloses the following:

An integrated device obtaining reference point GPS information, independent of the golf course infrastructure, using the GPS reflecting a measured location of a reference point and desired point (column 31, lines 4-16), and applying the one or more correction values to the desired point GPS information using the corrected location information for the desired point (column 31, lines 4-16) as recited in claim 99.

The corrected location information is used to calculate the distance between the desired point and stored target point (column 31, lines 4-16) as recited in claim 100.

The GPS device uses at least one tunable GPS parameter to obtain the reference point and desired point, in which the examiner interprets the mapping

of the course creation to be equivalent to the tunable GPS parameters (summary and column 13, line 1 – column 14, line 46) as recited in claim 140.

Barnard does not expressly disclose the following:

Comparing the GPS information with true location information for the reference point stored on the apparatus as recited in claim 99.

Dudley teaches the following:

Comparing the GPS information with true location information for the reference point stored on the apparatus (summary) as recited in claim 99. By comparing GPS information with true location information, one of ordinary skill in the art would provide an avid golfer with a precise distance between the ball to the hole.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Barnard to include comparing the GPS information with true location information for the reference point stored on the apparatus as taught by Dudley, to provide an avid golfer with a precise distance between the ball to the hole.

13. Claims 101-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard '938 in view of Dudley '786 as applied to claim 100 above, and further in view of Atkinson '938.

14. Barnard in view of Dudley disclose the claimed invention as discussed above except for the following:

The reference point GPS information includes latitude, longitude, and altitude values corresponding the reference point and desired point as recited in claims 101-102.

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Atkinson teaches the following:

The reference point GPS information includes latitude, longitude, and altitude values corresponding the reference point and desired point (summary and figures 4a-4e) as recited in claims 101-102. By including latitude, longitude, and altitude values corresponding the reference point and desired point, one of ordinary skill in the art would provide an avid golfer with a precise distance from the ball to the hole.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Barnard to further include information of latitude, longitude, and altitude values corresponding to the reference point and desired point as taught by Atkinson to provide an avid golfer with a precise distance from the ball to the hole.

15. Claims 107-110 and 142 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard '938 in view of Fisher '485.

16. Barnard discloses the following:

An integrated device having a first device, a GPS device connected to the first device, the GPS device adapted to produce measured location values corresponding to a location of the GPS device, means for transmitting error correction values from apparatus to a second apparatus (summary and column 37, lines 23-42) as recited in claim 107.

The transmitting means includes infrared and RF transmitters (summary) as recited in claims 108-109.

The GPS device uses tunable GPS parameters to produce the measured location values, in which the examiner interprets the mapping of the course creation to be equivalent to the tunable GPS parameters (summary and column 13, line 1 – column 14, line 46) as recited in claim 142.

Barnard does not expressly disclose the following:

Means within the apparatus for generating error correction values accounting for changes in environmental condition to be applied to the measure location values as recited in claim 107.

The transmitting means includes a direct cable connection between the first and second apparatus as recited in claim 110.

Fisher teaches the following:

A means within the apparatus for generating error correction values accounting for changes in environmental condition to be applied to the measure location values (summary) as recited in claim 107. By having generating error correction values accounting for changes in environmental condition, one of ordinary skill in the art would provide an avid golfer with a precise distance from the ball to the hole.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Barnard to include a means within the apparatus for generating error correction values accounting for changes in environmental condition to be applied to the measure location values as taught by Fisher to provide avid golfers with a precise distance from there ball to the hole.

At the time the invention was made, it would have been an obvious design choice to a person of ordinary skill in the art to provide a cable to transmitting information because Applicant has not disclosed that a direct cable for transmitting information provides an advantage or solves a stated problem. On of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with different communication means as taught by Barnard because having a cable or wireless would provide the same function of transmitting information from one device to another.

17. Claims III-III, II4-II6, and 149 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard '938 in view of Fisher '485.

18. Barnard discloses the following:

An integrated device (figure 1) having a display (28), a GPS device (20) and means for computing independently of a golf course infrastructure as recited in claims III and II4.

A means for receiving distance information from a second integrated personal golfing assistant (column 39, line 4-21) as recited in claims II3 and II6.

Barnard does expressly disclose the following:

A means for computing multiple approximate distances traveled by a golf ball after being hit by a golfer using one or more golf clubs and a means for displaying on the display a suggested club to be used by the golfer based on distance data entered by the golfer to the device as recited in claims III and II4.

A means for receiving distance information generated by the integrated device as recited in claims II2 and 15.

A means for selectively storing approximate differences, information representing the identify if each golf club used by the golfer, determining the average distance traveled by a golf ball, and determining a recommended club as recited in claim 149.

Fisher teaches the following:

A means for computing multiple approximate distances traveled by a golf ball after being hit by a golfer using one or more golf clubs (summary) as recited in claims 111 and 114.

A means for receiving distance information generated by the integrated device (summary) as recited in claims 112 and 15.

A means for selectively storing approximate differences, information representing the identify if each golf club used by the golfer, determining the average distance traveled by a golf ball, and determining a recommended club as recited in claim 149. By having a means for receiving distance information hit by a golfer using one or more golf clubs, one of ordinary skill in the art would provide avid golfers with statistical feedback regarding familiar shots.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Barnard to include a means for computing multiple approximate distances traveled by a golf ball after being hit by a golfer using one or more golf clubs and a means for receiving distance information generated by the integrated device and a means for selectively storing approximate differences, information representing the identify if each golf club used by the golfer, determining the average distance traveled by a golf ball, and

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determining a recommended club as taught by Fisher to provide avid golfers with feedback information regarding certain distances from there ball to the hole.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rudow `369 and `431, Lobb `680, Johnson `880, Huston `244 and `093, Remedio `677, Garn `797, and Hollenberg `256 disclose different types of golfing devices using GPS.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex P. Rada whose telephone number is 703-308-7135. The examiner can normally be reached on Monday - Friday, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, Jessica Harrison can be reached on 703-308-2217. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JESSICA HARRISON
PRIMARY EXAMINER